



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/429,935	10/29/1999	AKIYA SHICHIJO	PM-264103	6543

7590 06/20/2002

OLIFF AND BERRIDGE PLC  
PO BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER
----------

GONZALEZ, JULIO C

ART UNIT	PAPER NUMBER
----------	--------------

2834

DATE MAILED: 06/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/429,935

Applicant(s)

SHICHIJYO, AKIYA

Examiner

Julio C. Gonzalez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 October 1999 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the diodes being connected to at least two wires as disclosed in claim 18 (diodes are not shown to be connected to the wires) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 7 and 20, 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 7, the output lead wires are disclosed to be close to each other in phase.

How close is "close"? How much in phase do the wires differ?

Claim 20 discloses that the lead wire holes equal the number of phases of the phase voltages. Is that means that if the phase voltage is three phase voltage then the

number of lead wire holes is three? What specifically is meant by the phases of the phase voltage?

In claim 21, line 6, does the word "par" meant to disclosed the average of the stator winding or was the word meant to disclose a "pair" of stator winding?

In order to advance prosecution in the merits, the Prior Art will be applied as best understood by the examiner.

### ***Double Patenting***

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-21 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-8 of copending Application No. 09/985826.

This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: Both applications disclosed a rectifier for an ac generator, a rotor, three phase winding, input terminals, first and second lead wires connected to two rectifiers (claim 1)

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Umeda et al in view of Ooiwa et al and Yoshida et al.

Umeda et al discloses a shaft 6; a stator 2 having multi-phase stator winding 2 which has output for respective phase voltages; ac generator 1, a cooling fan 11, a rotor 3 and multi-phase stator winding 2 comprising a plurality of three-phase winding which are different in phase (see figure 18). Also, Umeda et al discloses a rectifier unit 5 which comprises a plurality of three-phase rectifiers (see figure 18) and stator winding 2 comprises a first star-connected three-phase winding and a second star-connected three-phase winding.

However, Umeda et al does not disclose output lead wires being used for the stator and fin parts in the ac generator.

On the other hand, Ooiwa et al discloses, for the purpose of improving the cooling performance in an ac generator, a rectifier unit 5 having input terminal connected to output lead wires which further comprises a terminal member 513 for holding the output lead wires. Also, the device having at least two output lead wires to be respectively connected to input terminal (see figure 5 and 6) and the rectifier unit 5 comprises a common positive cooling fin 501 and a common negative fin 503 (column 2, lines 23-27). Moreover the device has three lead wires each of which has a bundle of said output lead wires respectively extending from

the pair of three-phase windings (see figure 5 and 6). Ooiwa et al shows a frame with a wall which supports the stator on one side and the rectifier on another (see figure 1). Also, a plurality of input terminals positioned at the rectifier unit and the input terminal extending from the rectifier (see figure 3) and the rectifier has a plurality of diodes. Ooiwa discloses inherently the wire holes since the wire leads are between a clearance of the small and larger fins (column 3, lines 1-6) and also since the wire leads are used for making an electrical connection in the alternator. However, neither Umeda nor Ooiwa disclose explicitly the use of holes lead connections.

On the other hand, Yoshida et al discloses for the purpose of reducing breakage within a rectifier, terminal 58 which are designed as terminal connections with holes.

It would have been obvious to one having ordinary skill in the art to design an ac generator as disclosed by Umeda et al and to include a positive and negative fin and terminal members with lead connections each of which has a bundle for the purpose to improve the cooling performance of an ac generator as disclosed by Ooiwa et al and to make terminal holes for the purpose of reducing breakage within a rectifier as disclosed by Yoshida et al.

***Response to Arguments***

8. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

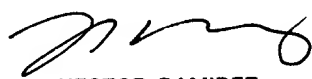
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

  
NESTOR RAMIREZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800

Jcg

June 17, 2002